

Federal Communications Commission

§ 15.209

GHz and 72.225–72.525 GHz bands only, and shall not exceed the limits specified in § 15.245(b).

(9) Devices operated in the 24.0–24.25 GHz band under § 15.249 are exempt from complying with the requirements of this section for the 48.0–48.5 GHz and 72.0–72.75 GHz bands only, and shall not exceed the limits specified in § 15.249(a).

(e) Harmonic emissions appearing in the restricted bands above 17.7 GHz from field disturbance sensors operating under the provisions of § 15.245 shall not exceed the limits specified in § 15.245(b).

[54 FR 17714, Apr. 25, 1989, as amended at 55 FR 46791, Nov. 7, 1990; 56 FR 6288, Feb. 15, 1991; 57 FR 13048, Apr. 15, 1992; 58 FR 33774, June 21, 1993; 60 FR 28068, May 30, 1995; 61 FR 14503, Apr. 2, 1996; 62 FR 4655, Jan. 31, 1997; 62 FR 58658, Oct. 30, 1997; 67 FR 34855, May 16, 2002; 68 FR 68546, Dec. 9, 2003; 69 FR 3265, Jan. 23, 2004; 69 FR 72031, Dec. 10, 2004]

§ 15.207 Conducted limits.

(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15–0.5	66 to 56*	56 to 46*
0.5–5	56	46
5–30	60	50

*Decreases with the logarithm of the frequency.

(b) The limit shown in paragraph (a) of this section shall not apply to carrier current systems operating as intentional radiators on frequencies below 30 MHz. In lieu thereof, these carrier current systems shall be subject to the following standards:

(1) For carrier current system containing their fundamental emission within the frequency band 535–1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(2) For all other carrier current systems: 1000 μ V within the frequency band 535–1705 kHz, as measured using a 50 μ H/50 ohms LISN.

(3) Carrier current systems operating below 30 MHz are also subject to the radiated emission limits in § 15.205, § 15.209, § 15.221, § 15.223, or § 15.227, as appropriate.

(c) Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power lines indirectly, obtaining their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.

[54 FR 17714, Apr. 25, 1989, as amended at 56 FR 373, Jan. 4, 1991; 57 FR 33448, July 29, 1992; 58 FR 51249, Oct. 1, 1993; 67 FR 45671, July 10, 2002]

§ 15.209 Radiated emission limits; general requirements.

(a) Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009–0.490	2400/F(kHz)	300
0.490–1.705	24000/F(kHz)	30
1.705–30.0	30	30
30–88	100**	3
88–216	150**	3
216–960	200**	3
Above 960	500	3

**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54–72 MHz, 76–88 MHz, 174–216 MHz or 470–806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.